AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1.   (Withdrawn) A method for treating a body, comprising:

detecting electrical signals from a first part of the body;

processing the detected electrical signals to generate a first control signal;

controlling a device based on the first control signal;

generating a second control signal; and

providing information relating to delivery of an agent to the body, wherein the information is based on the second control signal.

2.   (Withdrawn) The method of claim 1, wherein detecting electrical signals includes detecting electrical signals generated by brain neural signals.

3.   (Withdrawn) The method of claim 1, wherein detecting electrical signals includes detecting electrical signals generated by voluntary control.

4.   (Withdrawn) The method of claim 1, wherein detecting electrical signals includes detecting electrical signals generated by nerves.

5.   (Withdrawn) The method of claim 1, wherein detecting electrical signals includes detecting electrical signals generated by a tumor.

6.   (Withdrawn) The method of claim 1, wherein detecting electrical signals includes detecting electroencephalogram (EEG) signals.

7.　　(Withdrawn)　The method of claim 1, wherein detecting electrical signals includes detecting neuron spike signals.

8.　　(Withdrawn)　The method of claim 1, wherein detecting electrical signals includes detecting local field potentials.

9.　　(Withdrawn)　The method of claim 1, wherein detecting electrical signals includes detecting electrocortigram (EcoG) signals.

10.　　(Withdrawn)　The method of claim 1, wherein the device includes a computer.

11.　　(Withdrawn)　The method of claim 1, wherein the device includes a prosthetic limb.

12.　　(Withdrawn)　The method of claim 1, wherein the device includes a body part.

13.　　(Withdrawn)　The method of claim 1, wherein the second control signal is used to display information for delivering the agent.

14.　　(Withdrawn)　The method of claim 1, wherein the second control signal is based on a signal transmitted from the device.

15.　　(Withdrawn)　The method of claim 1, wherein the second control signal is based on data relating to the device.

16.　　(Withdrawn)　The method of claim 1, further comprising monitoring a parameter of the device.

17.   (Withdrawn) The method of claim 16, wherein the second control signal is generated based on the monitored parameter.

18.   (Withdrawn) The method of claim 17, wherein the monitored parameter reflects a performance value of the control over the device.

19.   (Withdrawn) The method of claim 17, further comprising delivering the agent to the body to alter the monitored parameter of the device.

20.   (Withdrawn) The method of claim 19, wherein the monitored parameter is a performance value of the device, and delivering the agent improves the performance value of the device.

21.   (Withdrawn) The method of claim 1, further comprising continuously monitoring a parameter of the device and continuously generating second control signals based on the continuous monitoring of the parameter.

22.   (Withdrawn) The method of claim 1, wherein the agent is a drug.

23.   (Withdrawn) The method of claim 1, wherein the second control signal includes information relating to a type of the agent delivered.

24.   (Withdrawn) The method of claim 1, wherein the second control signal includes information relating to a selection of the agent from a group of agents.

25.   (Withdrawn) The method of claim 1, wherein the second control signal includes information relating to an amount of the agent to deliver.

26.   (Withdrawn) The method of claim 1, wherein the second control signal includes information relating to a rate of delivery of the agent.

27.   (Withdrawn) The method of claim 1, wherein the second control signal includes information relating to an on/off state of delivery of the agent.

28.   (Withdrawn) The method of claim 1, further comprising implanting a sensor in the body proximate the part of the body, the sensor for detecting the electrical signals.

29.   (Withdrawn) The method of claim 28, wherein the sensor includes an array of electrodes.

30.   (Withdrawn) The method of claim 29, wherein the sensor includes a delivery unit to deliver the agent.

31.   (Withdrawn) The method of claim 30, wherein the delivery unit includes a reservoir associated with at least one electrode.

32.   (Withdrawn) The method of claim 31, wherein the reservoir is configured to store the agent.

33.   (Withdrawn) The method of claim 31, wherein the second control signal controls the delivery of the agent to the body from the reservoir.

34.   (Withdrawn) The method of claim 31, wherein the reservoir includes a membrane through which the agent may permeate.

35.   (Withdrawn) The method of claim 1, further comprising implanting a delivery unit in the body proximate to a second body part to which the agent is delivered.

36.   (Withdrawn) The method of claim 30, further comprising implanting a processor in the body and connecting the processor to the sensor and the delivery unit, wherein the processor is configured to generate the first and second control signals.

37.   (Withdrawn) The method of claim 36, wherein the sensor includes the processor.

38.   (Withdrawn) The method of claim 36, wherein the delivery unit includes the processor.

39.   (Withdrawn) The method of claim 36, wherein the processor includes a first processor associated with the sensor to generate the first control signal, and a second processor associated with the delivery unit to generate the second control signal.

40.   (Withdrawn) The method of claim 1, wherein the information is provided to a practioner.

41.   (Withdrawn) The method of claim 1, wherein the first part of the body is a brain.

42.   (Withdrawn) The method of claim 1, wherein the first part of the body is a portion of a central nervous system.

43.   (Withdrawn) The method of claim 1, wherein the first part of the body is a body organ.

44.   (Withdrawn) The method of claim 1, wherein the first part of the body is bone marrow.

45.   (Withdrawn) The method of claim 1, wherein generating the second control signal includes accessing a table of values stored in a processor.

46.   (Withdrawn) The method of claim 45, wherein the table of values includes values that control delivery of the agent.

47.   (Withdrawn) The method of claim 45, wherein the values are used to convert the detected electrical signals to the second control signal.

48.   (Withdrawn) The method of claim 45, further comprising changing the values in the table.

49.   (Withdrawn) The method of claim 48, wherein the values in the table are changed based on a measured parameter of the device.

50.   (Original)   A system for treating a body, comprising:

        a sensor configured to be proximate to a first part of the body generating electrical signals and to detect the electrical signals;

        a first processor connected to the sensor for processing the detected electrical signals to generate a first control signal;

a device configured to receive the first control signal and be controlled by the first control signal; and

a second processor configured to generate a second control signal based on a monitored parameter of the device and to provide information relating to delivery of an agent to the body based on the second control signal.

51. (Original)   The system of claim 50, wherein the sensor detects electrical signals generated by brain neural signals.

52. (Original)   The system of claim 50, wherein the sensor detects electrical signals generated by voluntary control.

53. (Original)   The system of claim 50, wherein the sensor detects electrical signals generated by nerves.

54. (Original)   The system of claim 50, wherein the sensor detects electrical signals generated by a tumor.

55. (Original)   The system of claim 50, wherein the sensor detects electroencephalogram (EEG) signals.

56. (Original)   The system of claim 50, wherein the sensor detects neuron spike signals.

57. (Original)   The system of claim 50, wherein the sensor detects local field potentials.

58.   (Original)   The system of claim 50, wherein the sensor detects

electrocortigram (EcoG) signals.

59.   (Original)   The system of claim 50, wherein the device includes a computer.

60.   (Original)   The system of claim 50, wherein the device includes a prosthetic

limb.

61.   (Cancelled).

62.   (Original)   The system of claim 50, wherein the first processor includes the

second processor.

63.   (Original)   The system of claim 50, wherein the second processor is

connected to the device.

64.   (Original)   The system of claim 50, wherein the second processor is

configured to receive information relating to the monitored parameter.

65.   (Original)   The system of claim 50, wherein the second control signal is used

to display information for delivery of the agent.

66.   (Original)   The system of claim 50, wherein the second control signal is based

on a signal transmitted from the device.

67.   (Original)   The system of claim 50, wherein the second control signal is based

on data relating to the device.

68. (Original) The system of claim 50, wherein the second processor monitors the parameter of the device.

69. (Original) The system of claim 50, further comprising an agent delivery unit configured to receive the second control signal.

70. (Original) The system of claim 50, wherein the monitored parameter reflects a performance value of the control over the device.

71. (Original) The system of claim 50, wherein the agent alters the monitored parameter of the device.

72. (Original) The system of claim 71, wherein the monitored parameter is a performance characteristic of the device, and the second control signal causes delivery of the agent to improve the performance characteristic of the device.

73. (Original) The system of claim 50, wherein the second processor continuously monitors the parameter of the device and continuously generates second control signals based on the continuous monitoring of the parameter.

74. (Original) The system of claim 50, wherein the agent is a drug.

75. (Original) The system of claim 50, wherein the second control signal includes information relating to a type of the agent delivered.

76.   (Original)   The system of claim 50, wherein the second control signal includes information relating to a selection of the agent from a group of agents.

77.   (Original)   The system of claim 50, wherein the second control signal includes information relating to an amount of the agent to deliver.

78.   (Original)   The system of claim 50, wherein the second control signal includes information relating to a rate of delivery of the agent.

79.   (Original)   The system of claim 50, wherein the second control signal includes information relating to an on/off state of delivery of the agent.

80.   (Original)   The system of claim 50, wherein the sensor includes an array of electrodes.

81.   (Original)   The system of claim 80, wherein the sensor includes an agent delivery unit.

82.   (Original)   The system of claim 81, wherein the agent delivery unit includes a reservoir associated with at least one electrode.

83.   (Original)   The system of claim 82, wherein the reservoir connects to the second processor to receive the second control signal.

84.   (Original)   The system of claim 50, wherein the second processor is configured to transmit information relating to the second control signal to a practicioner.

85.   (Original)   The system of claim 69, wherein the agent delivery unit includes a pump.

86.   (Original)   The system of claim 50, wherein the second processor communicates with an agent delivery unit through a wireless connection.

87.   (Original)   The system of claim 50, wherein the second processor communicates with an agent delivery unit through a wired connection.

88.   (Original)   The system of claim 50, wherein the first processor communicates with the device through a wireless connection.

89.   (Original)   The system of claim 50, wherein the first processor communicates with the device through a wired connection.

90.   (Original)   The system of claim 69, wherein the agent delivery unit includes the agent.

91.   (Original)   The system of claim 69, wherein the agent delivery unit includes a reservoir configured to store the agent.

92.   (Original)   The system of claim 91, wherein the second control signal controls the delivery of the agent to the body from the reservoir.

93.   (Original)   The system of claim 91, wherein the reservoir includes a membrane through which the agent may permeate.

94. (Original)   The system of claim 69, wherein the agent delivery unit is configured to be implanted in the body proximate to where the agent is delivered.

95. (Original)   The system of claim 50, wherein the sensor includes the first processor.

96. (Original)   The system of claim 69, wherein the agent delivery unit includes the second processor.

97. (Original)   The system of claim 50, wherein the sensor includes the first processor and the second processor.

98. (Original)   The system of claim 50, wherein the first part of the body is a brain.

99. (Original)   The system of claim 50, wherein the first part of the body is a tumor.

100. (Original)   The system of claim 50, wherein the first part of the body is a portion of a central nervous system.

101. (Original)   The system of claim 50, wherein the first part of the body is a body organ.

102. (Original)   The system of claim 50, wherein the first part of the body is bone marrow.

103. (Original)   The system of claim 50, wherein the second processor generates the second control signal using a stored table of values.

104. (Original)   The system of claim 103, wherein the table of values includes values that control delivery of the agent.

105. (Original)   The system of claim 103, wherein the values are used to convert the detected electrical signals to the second control signal.

106. (Original)   The system of claim 103, wherein the second processor is configured to permit the values in the table to be changed.

107. (Original)   The system of claim 106, wherein the values in the table may be changed based on the monitored parameter of the device.

108. (Original)   The system of claim 69, wherein the agent delivery unit includes a display for displaying agent delivery information to a practitioner.

109. (Withdrawn) A method for treating a body, comprising:

detecting neurological signals transmitted to a first part of the body, wherein the detected neurological signals relate to secretion of a first agent within the body;

processing the detected neurological signals to generate a first delivery control signal; and

delivering a second agent to the body based on the first delivery control signal.

110.   (Withdrawn) The method of claim 109, wherein the first and second agents are the same.

111.   (Withdrawn) The method of claim 109, further including sensing a physiological signal of the body.

112.   (Withdrawn) The method of claim 111, further including generating the first delivery control signal based on the sensed physiological signal and the detected neurological signals.

113.   (Withdrawn) The method of claim 112, wherein the generating of the first delivery control signal includes using the sensed physiological signal to confirm a value of the first delivery control signal generated based on the detected neurological signals.

114.   (Withdrawn) The method of claim 113, wherein the first delivery control signal is off if the physiological signal does not confirm the value of the first delivery control signal generated based on the sensed electrical signals.

115.   (Withdrawn) A method for treating a body, comprising:

    detecting electrical signals generated by a first part of the body;

    processing the sensed electrical signals to generate a performance value reflecting a performance of an applied treatment to the body;

    determining a delivery control signal based on the performance value; and

    delivering an agent to the body based on the delivery control signal.

116. (Withdrawn) The method of claim 115, wherein the first part of the body is a tumor location.

117. (Withdrawn) The method of claim 116, wherein the performance value reflects whether the applied therapy is reducing the tumor.

118. (Withdrawn) The method of claim 115, wherein the performance value is compared to a threshold to determine the delivery control signal.

119. (Withdrawn) The method of claim 115, further including determining a system function parameter reflecting a systemic function of the body affected by the applied treatment.

120. (Withdrawn) The method of claim 119, wherein the systemic function reflects a neurological response of the body.

121. (Withdrawn) The method of claim 119, wherein the systemic function reflects a respiratory response of the body.

122. (Withdrawn) The method of claim 119, wherein the systemic function reflects a cardiovascular response of the body.

123. (Withdrawn) The method of claim 119, wherein the systemic function parameter reflects a side-effect of the applied treatment.

124. (Withdrawn) The method of claim 119, wherein determining the delivery control signal includes determining the delivery control signal based on the systemic function parameter.

125. (Withdrawn) The method of claim 124, wherein the delivery control signal causes delivery of the agent when the systemic function parameter reflects the applied treatment has resulted in acceptable side-effects.

126. (Withdrawn) A method for treating a body, comprising:

      detecting electrical signals from a part of the body;

      processing the detected electrical signals to generate a first control signal;

      controlling a device based on the first control signal;

      monitoring a parameter of the device;

      comparing the parameter to a value;

      generating a second control signal based on the comparison of the parameter to the value; and

      providing information relating to delivery of an agent to the body, wherein the information is based on the second control signal.

127. (Withdrawn) The method of claim 126, wherein the parameter is a performance characteristic of the device.

128. (Withdrawn) The method of claim 127, wherein the value is a performance standard stored in a processor.

129.   (Withdrawn) The method of claim 128, wherein the performance standard is a threshold, and comparing the parameter to the value includes determining whether the performance characteristic is above the threshold.

130.   (Withdrawn) The method of claim 128, wherein the performance standard relates to a trend in the parameter.

131.   (Withdrawn) The method of claim 126, further comprising delivering the agent to the body.

132.   (Withdrawn) The method of claim 131, wherein delivering the agent alters the parameter.

133.   (Withdrawn) A method for treating a body, comprising:

>   detecting electrical signals from a part of the body;

>   processing the detected electrical signals to generate a first control signal;

>   controlling a device based on the first control signal;

>   monitoring a parameter of at least one of the detected electrical signals and the first control signal;

>   comparing the parameter to a value;

>   generating a second control signal based on the comparison of the parameter to the value; and

>   providing information relating to delivery of an agent to the body, wherein the information is based on the second control signal.

134.   (Withdrawn) The method of claim 133, wherein the parameter is stability of the first control signal.

135.   (Withdrawn) The method of claim 133, wherein the parameter is a spike activity of the detected electrical signals.

136.   (Withdrawn) The method of claim 133, wherein the parameter the amount of data filtered to generate the first control signal.

137.   (Withdrawn) The method of claim 133, wherein the parameter is a noise level of the first control signal.

138.   (Withdrawn) The method of claim 133, wherein the value is a threshold.

139.   (Withdrawn) The method of claim 133, wherein the value relates to a trend in the parameter.

140.   (Withdrawn) The method of claim 133, further comprising delivering the agent to the body.

141.   (Withdrawn) The method of claim 140, wherein delivering the agent alters the parameter.

142.   (Currently Amended)   A system for treating a body, comprising:

a sensor configured to be proximate to a first part of the body generating electrical signals and to detect the electrical signals;

a first processor connected to the sensor for processing the detected electrical signals to generate a first control signal;

a device configured to receive the first control signal and be controlled by the first control signal; and

a second processor configured to generate a second control signal based on a measured parameter of at least one of the detected electrical signals and the first control signal, the second processor configured to provide information relating to delivery of an agent to the body to a second device based on the second control signal.

143.   (Original)   The system of claim 142, wherein the parameter is stability of the first control signal.

144.   (Original)   The system of claim 142, wherein the parameter is a spike activity of the detected electrical signals.

145.   (Original)   The system of claim 142, wherein the parameter is the amount of data filtered to generate the first control signal.

146.   (Original)   The system of claim 142, wherein the parameter is a noise level of the first control signal.

147.   (Currently Amended)   The system of claim 142, further comprising wherein the second device includes an agent delivery unit configured to receive the information relating to the second control signal.

148. (Original)   The system of claim 147, wherein delivering the agent alters the parameter.

149. (Original)   The system of claim 142, wherein the first processor includes the second processor.